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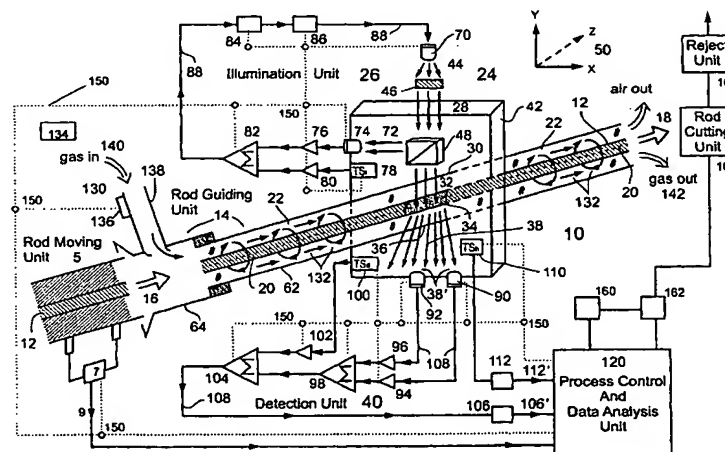
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(54) Title: **ELECTRO-OPTICALLY INSPECTING A LONGITUDINALLY MOVING ROD OF MATERIAL**



(57) Abstract: Electro-optically inspecting a longitudinally moving rod of material (12). Guiding rod (12) along its longitudinal axis by rod guiding unit (14), along optical path (20) within transparent passageway (22). Optical path (20) and transparent passageway (22) coaxially extend along longitudinal axis of rod (12) and pass through an electro-optical transmission module (24). Focused beam (28) from illumination unit (26) is transmitted through first side (30) of transparent passageway (22) and incident upon rod (12) within transparent passageway (22). Illuminating volumetric segment (34) of rod (12) by incident beam (32), such that incident beam (32) is affected by and transmitted through volumetric segment (34) and transmitted through second side (36) of transparent passageway (22), for forming rod material transmitted beam (38). Detecting transmitted beam (38) by detection unit (40), for forming rod material volumetric segment transmitted beam useable for determining internal properties and characteristics of rod of material (12).

WO 2004/017099 A3

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/IL03/00688

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 21/00

US CL : 432, 433, 434, 435, 237.1, 239.1, 239.4, 239.5, 239.6

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 432, 433, 434, 435, 237.1, 239.1, 239.4, 239.5, 239.6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
EAST

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,610,542 A (RINGLIEN) 09 September 1986, see entire document.	1-20
A	US 4,606,634 A (BIERINGER) 19 August 1986, see entire document.	1-20

☐ Further documents are listed in the continuation of Box C.

☐ See patent family annex.

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